explanation of wholeness; but he decidedly repudiates the isomorphism of the *Gestalt* psychologists which makes the physical principle the explanation of intra-central or psychic wholes.

Ever}' organism is in every moment a whole; and all its activities are whole-related, including not only its modes of responding to sense-impressions, but also all its metabolic processes; especially all morpho-genetic processes are whole-related, and are not closely bound in one to one relations with the constellations of their material substrates.

Bertalanffy's Holistic Views

Ludwig von Bertalanffy in his *Modern Theories of Development* is chiefly concerned to expound and to establish the organismic viewpoint, as also in his larger work on *Theoretical Biology,* ' The physico-chemical investigation of the vital process has given us, from the time of Harvey's fundamental discovery up to the most modern results of colloid-, ion-, and enzyme-chemistry, an uninterrupted chain of important discoveries—and yet there are good grounds for the belief that they still scarcely touch the essential problems of biology. The physiology of development and of behaviour work with systems of ideas which, at least at present, show only superficial relations to physics and chemistry. . . . The procedure of the biology of yesterday has failed. . . . We can undoubtedly describe the organism and its processes physico-chemically *in principle,* although we may still be far removed from reaching

such a goal. But as *vital* processes they are not characterized in this way at all, since what is essential in the organism . . . is that the particular physico-chemical processes are organ-